AMENDMENTS TO THE CLAIMS: A LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS AND MARKINGS TO SHOW CHANGES MADE

1-14. (Canceled)

15. (New) An actuator having an operating state, comprising:

at least one actuating element;

a plurality of sensors, said sensors being adapted to detect measurement variables when the actuator is in the operating state;

a first data bus; and

an evaluation unit connected to at least one sensor of the plurality of sensors and to the actuating element by the first data bus.

16. (New) The actuator of claim 15, further comprising a controller adapted to control the actuator; and a second data bus, said second data bus connecting the evaluation unit to the controller.

17. (New) The actuator of claim 15, further comprising a plurality of said actuating elements, said plurality of sensors and plurality of actuating elements being connected to the evaluation unit by the first data bus.

18. (New) The actuator of claim 15, further comprising data in at least one sensor and at least one actuating element, said data being adapted to be transmitted to the evaluation unit, said data including identification data and operating parameter data.

19. (New) The actuator of claim 15, further comprising an electric motor adapted to drive the actuator; and at least one return-blocking means in an actuator element, said return blocking means being adapted to block a rotary movement of the electric motor when the actuator is not driven by the motor.

20. (New) The actuator of claim 19, wherein the electric motor is a linear-drive motor.

21. (New) The actuator of claim 15, further comprising a housing, said evaluation unit being disposed in the housing; and a connector on the housing, said connector being adapted to connect the evaluation unit to the controller via the second data bus.

22. (New) The actuator of claim 21, wherein the connector is a plug connector adapted to be connected to a cable outside the housing.

23. (New) An actuator having an operating state, comprising:
   at least one actuating element;
   a plurality of sensors, said sensors being adapted to detect measurement variables when the actuator is in the operating state;
   a first data bus;
   an evaluation unit connected to at least one sensor of the plurality of sensors and to the actuating element by the first data bus;
   means for comparing operating parameters to required parameters; and
   means for providing data from the first data bus to the evaluation unit when an operating parameter satisfies a required parameter.

24. (New) The method of claim 23, further comprising means for providing a fault signal to the controller over the second data bus when an operating parameter does not satisfy a required parameter.

25. (New) A method for operating an actuator having an evaluation unit connected to at least one sensor and to at least one actuating element via a first data bus, said sensor and actuating element having data representing an operating state of the actuator, said method comprising the steps of:

transmitting data from the sensor to the evaluation unit using a first data bus; and

transmitting data from the actuating element to the evaluation unit using the first data bus.

26. (New) The method of claim 25, further comprising the step of controlling an actuating element using the first data bus.

27. (New) The method of claim 25, wherein the actuator has a controller adapted to control the actuator, the method further comprising the step of transmitting data from the evaluation unit to the controller using a second data bus.

28. (New) The method of claim 25, further comprising the step of transmitting identifying data that identifies a data source of data transmitted to the evaluation unit using the first data bus.

29. (New) The method of claim 25, further comprising the steps of transmitting operating parameter data for a data source of data transmitted to the evaluation unit using the first data bus.

30. (New) The method of claim 29, further comprising the steps of transmitting identifying data that identifies a data source of data transmitted to the evaluation unit using the first data bus, determining whether the evaluation unit has operating parameter data for a data source represented by the identification data, and transmitting operating parameter data from an operating parameter source to the evaluation unit, when the evaluation unit does not have operating parameter data for the data source represented by the identification data.

31. (New) The method of claim 29, wherein operating parameter data has been sent to the evaluation unit from a plurality of sources, and further comprising the step of processing the data transmitted to the evaluation unit using the first data bus as a function of the operating parameter data.

32. (New) The method of claim 25, further comprising the steps of at least partially processing data transmitted from the sensors and actuating elements to the evaluation unit in the evaluation unit; and transmitting the at least partially processed data from the evaluation unit to the controller.

33. (New) The method of claim 32, wherein the processing step includes the steps of comparing operating parameters to required parameters, and providing a fault signal to the controller over the second data bus when an operating parameter does not satisfy a required parameter.

34. (New) The method of claim 32, wherein the processing step includes the steps of comparing operating parameters to required parameters, and providing data from the first data bus to the evaluation unit when an operating parameter satisfies a required parameter.